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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/753,466

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Kuo-Tsai Chiou

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ROSENBERG, KLEIN & LEE

3458 ELLICOTT CENTER DRIVE-SUITE 101

ELLICOTT CITY, MD 21043

EXAMINER

SALCE, JASON P

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/753,466	<b>Applicant(s)</b> CHIOU, KUO-TSAI	
	<b>Examiner</b> Jason P. Salce	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 6-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nio et al. (U.S. Patent No. 7,256,837) in view of D'Luna et al. (U.S. Patent Application Publication 2002/0106018).

Referring to claim 1, Nio discloses a front end processing chip transferring from analog to digital (**see transport decoder 1001 in Figure 1**) and demodulating the incoming broadcast signal (**see Column 3, Lines 9-14**).

Nio also discloses a terminal processing chip being connected to the front-end processing chip for processing broadcast signals and transferring from digital to analog (**see MPEG decoder 102 in Figure 1 for converting signal SC to signal SC, which includes SG (Green), SB (Blue) and SR (Red)**).

Nio also discloses a digital image processing device being connected to the terminal processing chip for transferring received output image signals to digital output signals and demonstrating the digital output signals on a digital displaying device (**see DVI transmitter 103 and display unit 108 in Figure 1**).

Nio also discloses a digital image connecting means being an interface of demonstrating the digital output signals on a digital displaying device (**see DVI cable connection 109 in Figure 1**).

Nio fails to disclose that the transport decoder 1001 includes forward error correction processing.

D'Luna discloses a front end processing chip that includes a forward error correction processing portion (**see FEC 326 in Figure 2 and Paragraph 0081**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the front end processing chip, as taught by Nio, using the FEC circuit, as taught by D'Luna, for the purpose of combating both Gaussian noise and impulse errors (**see Paragraph 0081 of D'Luna**).

Referring to claim 2, Nio discloses that the digital image connecting means is a DVI connecting means (**see DVI cable 109 in Figure 1**).

Referring to claim 6, D'Luna discloses that the connecting detecting unit is a single functional of the terminal processing united chips (**see Paragraph 0007**).

Referring to claim 7, Nio discloses that the video switching device has one connecting port (**see TS input connecting port in Figure 1 and an SDVI connecting port in Figure 1**).

Referring to claim 9, D'Luna discloses that the video switching device is a mono-structure (**see again Paragraph 0007**).

Referring to claim 10, Nio discloses that the video switching device is connected to the digital displaying device through an IEEE 1394 connection (**see Column 9, Lines 6-67**).

Referring to claim 11, Nio discloses that the video switching device is connected to a computer by a pin fillister and a connecting channel (**see the SDVI connection 109 in Figure 1 and note that an SDVI connection contains a pin fillister and connecting channel in the physical connector of an SDVI cable**).

Claim 3, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nio et al. (U.S. Patent No. 7,256,837) in view of D'Luna et al. (U.S. Patent Application Publication 2002/0106018).

Referring to claim 3, Nio and D'Luna disclose all of the limitation in claim 1, as well as an image processing device residing on a single chip (**see Paragraph 0007**), however, Nio and D'Luna fail to teach the specific use of a Silicon Image IC Si1164 chip being use to contain the image processing device.

The examiner takes Official Notice to the fact that Silicon Image IC Si1164 chips are used to contain various types of television processing circuits.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the single chip, as taught by Nio and D'Luna, using a

Silicon Image Si1164, as taught by the examiner Official Notice, for the purpose of providing a name brand chip that is widely available to a manufacturer or consumer.

Referring to claim 8, Nio and D'Luna disclose all of the limitation in claim 7, but fail to teach that the connecting port is a game-controlling port.

The examiner takes Official Notice to the fact that game-connecting ports are using in video switching devices.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the connecting port, as taught by Nio and D'Luna, using a game-controlling port, as taught by the examiner Official Notice, for the purpose of allowing a user of a video switching device to play a game on his/her television.

Referring to claim 12, Nio and D'Luna disclose all of the limitation in claim 11, but fail to teach that the connecting channel is a PCI interface.

The examiner takes Official Notice to the fact that PCI bus interfaces are used as connecting channel within a video switching device.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the connecting channel, as taught by Nio and D'Luna, using PCI interface, as taught by the examiner Official Notice, for the purpose of providing a faster, standardized bus to transfer data between video devices.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nio et al. (U.S. Patent No. 7,256,837) in view of D'Luna et al. (U.S. Patent Application Publication 2002/0106018) in further view of Boccaccio (U.S. Patent No. 6,480,214).

Referring to claim 4, Nio and D'Luna disclose all of the limitation in claim 1, as well as Nio further disclosing that the video switching device includes an image processing means (**see video signal processor 105 in Figure 1**), an RF circuit (**see combiner 107 in Figure 1**) and an RF output terminal connecting to at least one display device (**see the output of combiner 107 in Figure 1**), as well as D'Luna teaching an S-Video output terminal (**see Paragraph 0033 of D'Luna**), however Nio and D'Luna fail to teach a set of S-video output terminals.

Boccaccio discloses a video switching device in Figures 2-3. Boccaccio also discloses that the outputs of the video switching device contain a set of S-Video output terminals (**see Figure 10**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the single S-Video output, as taught by Nio and D'Luna, using a set of S-Video output terminals, as taught by Boccaccio, for the purpose of satisfying the ever increasing need for a quality color signal, thereby providing a quality picture pleasing to the viewer (**see Column 4, Lines 14-21 of Boccaccio**).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nio et al. (U.S. Patent No. 7,256,837) in view of D'Luna et al. (U.S. Patent Application Publication

2002/0106018) in further view of Boccaccio (U.S. Patent No. 6,480,214) in further view of Stone et al. (U.S. Patent No. 7,176,980).

Referring to claim 5, Nio, D'Luna and Boccaccio disclose all of the limitation in claim 4, but fail to teach that the video switching device contains a connecting detecting unit to detect specifications of the displaying device for determining a formation of the output signals.

Stone discloses a connecting detecting unit to detect specifications of the displaying device for determining a formation of the output signals (**see Figures 1-4 and Column 3, Line 47 through Column 6, Line 31**)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the video switching device, as taught by Nio, D'Luna and Boccaccio, using the format detection device, as taught by Stone, for the purpose of verifying a video format supported by a display device, thereby providing a robust consumer experience (**see Column 2, Lines 12-15 of Stone**).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason P Salce/  
Primary Examiner, Art Unit 2623

Jason P Salce  
Primary Examiner  
Art Unit 2623

March 16, 2008